# 2005

# **WISCONSIN**

# Winnebago Pool Lakes Sturgeon Spearing Regulations & Information

Wisconsin Department of Natural Resources Bureau of Fisheries Management and Habitat Protection





# LAKE WINNEBAGO STURGEON SPEARING REGULATIONS

# Please take a few minutes to carefully read through this regulation pamphlet.

Dear Winnebago Sturgeon Spearer,

The 2005 sturgeon spearing season is upon us and spearers of all ages are anxious to get into their shacks hoping to see their trophy. Spearers this year will be pursuing their sport on the Upriver Lakes as well as on Lake Winnebago. Our preliminary sales figures indicate 6,465 spearers purchased licenses to spear Lake Winnebago while 4,169 spearers purchased licenses to spear the Upriver Lakes. Under current rules the Upriver Lakes season is open for sturgeon spearing once every five years.

We have all worked hard over the last 13 years and made numerous changes in the spearing season format to help reduce the harvest of adult female sturgeon, and still allow any person that wants to, the opportunity to spear. We have made good progress in reducing the harvest rates and in continuing to provide excellent spearing opportunities. Keeping the harvest at a safe level is of the utmost importance if we want to maintain a viable sturgeon population and spear fishery.

The most pressing question facing our sturgeon management program at this time though is how do we make the season longer and maintain an open fishery, while at the same time maintaining safe harvest levels. After relatively long seasons in 2002 and 2003, the 2004 spearing season was back to a short two day season with a record harvest rate resulting in 1854 fish registered after only 12 hours of spearing!

We did exceed the harvest cap set for adult females in 2004, but tag returns indicate that our harvest may not have reached the level of serious overharvest. The harvest level did tell us though that we still have some work to do to better guarantee we do not overharvest in the future.

Following the 2004 spearing season I conducted a series of public meetings and met several times with the Winnebago Citizens Sturgeon Advisory Committee. We discussed several ideas suggested by the public to allow us to have a longer spearing season while at the same time preventing overharvest including creating a refuge on the south end of Lake Winnebago, doing something different with the Upriver Lakes fishery, or creating an Intensive Zone Fishery. The Intensive Zone Fishery option, suggested by one of the area's fishing clubs, would limit spearing effort in areas of high fish concentration (such as the south end of Lake Winnebago and the Upriver Lakes) while the remaining vast majority of Lake Winnebago would remain an open fishery with no limitation on effort.

The Intensive Zone Fishery and other options will be discussed further at public meetings scheduled for early March 2005 around Lake Winnebago and the Upriver Lakes:

Tuesday March 8, 7:00 PM – Fisher's Westward Ho Hall, Butte des Mort (northwest of Oshkosh)

Wednesday March 9, 7:00 PM – Taycheedah Town Hall (northeast of Fond du Lac)

Watch for more information on the meetings following the conclusion of the spearing season.

I hope to see you at one of the meetings. In the meantime, have a safe and enjoyable 2005 sturgeon spearing season.

# Ron Bruch

Winnebago Sturgeon Biologist

# 2005 OPEN SEASON

February 12, 2005 through February 27, 2005 on Lake Winnebago or until the pre-set harvest cap is reached.

February 12, 2005 on Lakes Butte des Mort, Winneconne and Poygan (the Upriver Lakes)

Lake Winnebago and the Upriver Lakes are collectively known as the Winnebago Pool Lakes and will be referred to as such in this pamphlet.

Total harvest of sturgeon will be limited through pre-set harvest caps. Harvest caps for the 2005 Winnebago System spearing season are 500 for adult females, 500 for juvenile females and 2000 for males. The Department will close the sturgeon spearing season when one of the two following conditions occurs:

- 24 hours from the end of the fishing day within which a harvest of 80% to 99% of any one of the three harvest caps listed above is reached, or
- At the end of the fishing day within which 100% of any one of the three harvest caps is reached or exceeded.

**BAG LIMIT**: One lake sturgeon per licensee

#### **MINIMUM LENGTH LIMIT**: 36 inches

#### LICENSE REQUIREMENT

To spear sturgeon, residents must purchase a Sturgeon spearing license and tag for \$20.00 and nonresidents must purchase a Sturgeon spearing license and tag for \$50.00

Only persons 14 years of age and older are eligible to spear sturgeon.

No sturgeon spearing license may be issued or purchased after October 31, 2004 except for Wisconsin residents that turn 14 between November 1, 2004 and the last day of the 2005 spearing season, and for Wisconsin residents serving in the Armed Forces home on leave during the 2005 spearing season.

The sturgeon spearing license and tag must be carried by the licensee at all times while fishing for sturgeon with a spear.

A sturgeon spearing license and tag is nontransferable. No person may possess the tag or license of another. **GROUP BAGGING IS ILLEGAL!** 

No person may possess a validated sturgeon carcass tag unless attached to a legal sturgeon.

## **SPEARING HOURS**

6:30 am to 12:30 pm

No artificial lights of any kind can be utilized while spearing.

Any sturgeon speared must be registered the same day it was speared by 1:30 PM.

## **TAGGING REQUIREMENT**

A spearer with an unused and valid sturgeon license and tag who spears a lake sturgeon must <u>immediately</u> validate and attach the spearer's carcass tag to the sturgeon (just forward of the tail).

It is illegal for any person to possess any sturgeon or part thereof without the carcass tag validated and attached.

# **TRANSPORTATION**

It is unlawful for any person to transport any unregistered sturgeon in or on any motor driven vehicle unless the sturgeon is carried openly exposed and placed so the carcass tag cannot be handled by anyone. "Openly exposed" means open to view by a person in a passing vehicle.

To transport a legally harvested and tagged sturgeon the fish must be accompanied by the spearer until registered

It is illegal to possess an unregistered sturgeon speared from Lakes Butte des Mort, Winneconne or Poygan outside the highway boundary area delineated as follows: From the intersection of highways 41 and 21 in Oshkosh west on highway 21 to highway 116; north on highway 116 to county highway B; west on county highway B to county highway D; west on county highway 49; north on highway 49 to county highway H; east on county highway H to highway 10; east on highway 10 to county highway II; south on county highway II to county highway M; south on county highway M to highway 116; east on highway 116 to highway 45; south on highway 45 to highway 41; south on highway 41 to highway 21.

It is illegal to possess an unregistered sturgeon speared from Lake

Winnebago outside the highway boundary area delineated as follows: From the intersection of highways 10 and 114 in Menasha, east on highway 114 to highway 55; south on highway 55 to U.S. highway 151; south on U.S. highway 151 to Scott street in Fond du Lac; west on Scott street to highway 45; north on highway 45 to Main street in Oshkosh; north on Main street to Waugoo avenue; east on Waugoo avenue to Bowen street; north on Bowen street to North Shore drive; north on North Shore drive to county highway A; north on county highway A to highway 114 in Neenah; east on highway 114 to the intersection of highways 10 and 114 in Menasha.

#### REGISTRATION

A person who spears a sturgeon must accompany and exhibit the tagged sturgeon at an official sturgeon registration station (see map) no later than 1:30 p.m. on the day speared. To avoid the "end of the day" rush please bring your fish in as soon as possible after spearing it.

Any fish harvested from Lake Winnebago <u>must</u> be registered at one of the sturgeon registration stations on Lake Winnebago. Any fish harvested from Lakes Butte des Mort, Winneconne or Poygan (the Upriver Lakes) <u>must</u> be registered at one of the sturgeon registration stations on the Upriver Lakes.

Department Fisheries staff at the registration stations will collect biological information on the size, sex and age of your fish, and will attach a metal sturgeon registration tag.

The sturgeon carcass and registration tag must be retained until the carcass is consumed.

## ICE HOLE RESTRICTIONS

No person may cut, use, or maintain an ice hole larger than 12 inches in diameter or square for the taking of fish in any manner through the ice except spearing sturgeon on the Winnebago Pool Lakes during the open season. The total area of a sturgeon spearing hole or combination of holes in an individual spearing shelter may not exceed a total of 48 square feet.

Ice holes larger than 12 inches cut, used, or maintained may not be covered by a shelter, shanty, or similar devise, except during the period from 48 hours before and continuing through the open season for sturgeon spearing season.

#### POSSESSION AND USE OF A SPEAR

No person may have under his or her control any spear or similar device in any enclosure on the ice or waters of the Winnebago Pool Lakes except when

authorized during established sturgeon spearing seasons.

No person may take, capture, kill or attempt to kill sturgeon on the Winnebago Pool Lakes by any means other than spearing with a spear thrown by hand from inside a fishing shelter placed on the ice during the open spearing season.

## SPEARING OF ROUGH FISH

Spearing of rough fish from the Winnebago Pool Lakes is prohibited during the sturgeon spearing season.

## **ICE HOLE MARKING**

Sturgeon spearing ice holes must be marked with at least 2 strips of wood that are at least 3 feet above the ice. The wood strips must not exceed 1.5 inches in width and .25 in thickness (wood lathe meet requirement).

It is advisable to cut a hole and freeze the lathe into the ice for better marking of sturgeon holes. Lathe markers stuck in snow banks are <u>not</u> adequate because of snow melt during warm weather conditions.

## STURGEON REGISTRATION STATIONS

Operated daily throughout the season by DNR Fisheries staff (Some stations may be closed before the end of the season depending upon spearing activity and volume of sturgeon registrations. Any necessary early closures will be posted at registration stations)

Lake Winnebago Stations

- A at Waverly Beach Resort

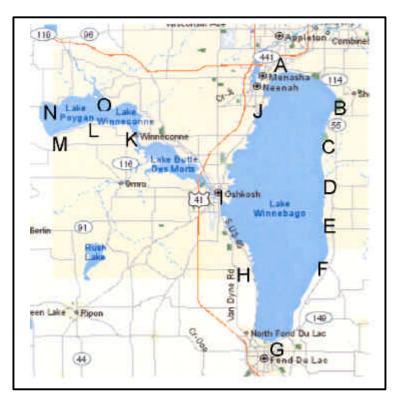
  Junction of U.S. Hwys 10 & 114
- B at Fishtale Inn
  Calumet County Park Road
- C at Harbor Bar Stockbridge on the lake
- D at the Quinney Quencher *Quinney on the lake*
- E at Fisherman's Inn

  Brothertown
- F at the DNR Calumet Harbor Office Pipe on the lake
- G at Roosevelt County Park, Fond du Lac Co. Hwy 151 on the lake west of Sunset Supper Club
- H at Wendt's Bar & Harbor Hwy 45 8 mi. N of Fond du Lac

- I at Jerry's Tavern
  1210 Ceape St., Oshkosh
- J at Payne's Point Tavern
  Cty Trk A 3 mi. S of Neenah

## **Upriver Lakes Stations**

- K at Winneconne Fire Station Winneconne
- L at Nofke's Bait Shop Southcentral shore of Lake Poygan
- M at Captain's Cove Tavern
  Southwest shore of Lake Poygan
- N at Tustin Fire Dept. Tent
  Northwest corner of Lake Poygan (on the ice)
- O at Boom Bay Fire Dept. Tent
  Northeast corner of Lake Poygan (on the ice)



#### LITTER

It is illegal to place or deposit any materials (including biodegradable) on the lake bed. Any material used in a sturgeon spearing hole must be removed by the sturgeon spearer when the hole is abandoned, or if requested by a warden.

Any material that is left on or frozen in the ice or waters is the responsibility of the person who left the material (including tar paper, wood, cardboard used adjacent to shanties).

#### FISHING EQUIPMENT OR GEAR

It is unlawful to possess a fishing pole, hook and line, angling equipment or other similar devices that could be used to catch fish in an ice fishing tent, shanty, or other ice fishing enclosure with ice holes larger than 12 inches in diameter or square.`

## **ICE SHANTIES AND SHELTERS**

The door of any occupied shanty/shelter shall be such that the door can be readily opened from the outside.

All shanties/shelters must have the name and residential address of the person owning or using the shanty. The name and address must be painted or permanently affixed on the outside with a minimum of 1" lettering.

All shanties/shelters must be removed from the ice on or before March 5 south of Highway 64.

# LAKE STURGEON OF THE WINNEBAGO SYSTEM

The Winnebago System likely holds the largest natural sustaining lake sturgeon population in the world, and is used as an egg source for lake sturgeon reintroduction and rehabilitation projects throughout the fish's original North American range.

Lake sturgeon are slow growing, long living and late maturing fish. Both males and females will attain legal size in the spear fishery (36 inches) in 7 to 10 years. Males and females generally grow at similar rates up to about 40", after which females grow faster.

Females typically live longer and therefore attain much larger sizes, making up most of the population of fish over 60 inches. Females have the potential to live

80+ years while few males have been found in excess of the age of 40.

Males do not mature until they are age 13-15 (40"-43", 12-20 lbs) and females age 20-24 (50"-59", 40-60 lbs).

# History of the Winnebago sturgeon fishery

Pre

- 1903 No harvest regulations.
- 1903 8 lb (3.6 kg) minimum size limit.
- 1913 14 May to 31 April open season, 20 lb (9.1 kg) round weight minimum size limit.
- 1915 First concern about overharvest of sturgeon stocks in Wisconsin. All sturgeon harvest on the Winnebago System is prohibited.
- 1932 First regulated spearing season on Lake Winnebago, January 1-March 1, 30 " (76.2 cm) minimum size limit, 5 bag limit per person per season, tags \$.05 each, fishing license required.
  - Set line fishery opened on the Upriver Lakes, September 5 to October 31, 30" (76.2 cm) size limit, 5 bag limit per person per season (spear and set line fisheries combined), tags \$.05 each, set line license required.
- 1935 Wolf River hook and line season opened (Waupaca and Winnebago Counties), September 5 to October 31, no minimum size limit, 5 bag limit per person per season (spear, set line and hook & line combined), tags \$.05 each, fishing license required.
- 1937 Wolf River hook and line season expanded to include Shawano County.
- 1939 Hook and line season on Wolf River shortened by two weeks, September 5 to October 15
- Hook and line 30" (76.2 cm) minimum size limit initiated, and bag limit modified to allow only 1 fish per day. (maintaining 5 per season limit),

1941 Hook and line season closed on Wolf River.

Lake Winnebago spearing season reduced to one month, February 1 through March 1.

First significant assessment conducted on the sturgeon spearing harvest by Wisconsin Conservation Department Fisheries Biologists Edward "Doc" Schneeberger and Lowell Woodbury.

- 1944 Hook and Line season reopened on Wolf River but in Winnebago County only.
- 1946 Hook and line season opened on all portions of Wolf River (now including Outagamie County), retaining previous season length of September 5 to October 15, 30" (76.2 cm) size limit, bag limit of 5 per season, and \$.05 tags.

late Wisconsin Conservation Department Fisheries Biologists Robert 1940's Probst, Edwin Cooper and Vern Hacker conduct first significant biological assessment on the Winnebago sturgeon population.

# 1940's Average annual sturgeon spear harvest through the 1940's: 691

- 1950 Hook and line, and spearing sturgeon tag fees increased to \$1.00 each.
- 1952 Set line season on Upriver Lakes closed.

"Experimental" spearing season conducted on the Upriver Lakes, 16 days February 15 through March 1, 30" (76.2 cm) minimum size limit, seasonal bag limit of three, (Lake Winnebago retained the Feb 1 -March 1 season and the bag limit of 5).

1953 Hook and line seasonal bag limit on Wolf River reduced to 3.

Upriver Lakes spearing season reduced to 14 days.

Record sturgeon harvested on Lake Winnebago: 180 pound, 79" fish speared by Elroy Schroeder of Appleton.

Record sturgeon harvest (Winnebago and Upriver lakes combined) of 2828 fish taken during seasons of 29 days on Lake Winnebago and 14 days on the Upriver Lakes.

First serious concern about overharvest of the sturgeon population since harvest ban enacted in 1915.

1954 Spearing seasonal bag limit on Lake Winnebago reduced to 3.

First biological assessment conducted on the sturgeon spawning stock by WCD Fisheries Biologists Tom Wirth, Gordon Priegel and Clarence Cline (conducted annually until 1964).

1955 Minimum size limit for spear fishery (Lake Winnebago and Upriver Lakes) increased from 30" (76.2 cm) to 40" (101.6 cm).

First year of mandatory registration of all sturgeon harvested in spear fishery (Lake Winnebago and Upriver Lakes); fish must be registered on same day speared by 6:00 pm.

1956 Spearing, and hook and line seasonal bag limit reduced to 2 fish.

Upriver Lakes spearing season reduced to 9 days.

Lake Winnebago spearing season reduced to 2nd Saturday in February through March 1.

1957 Spearing seasonal bag limit on the Upriver Lakes reduced to 1 fish (2 fish limit retained on Lake Winnebago).

Upriver Lakes season length reduced to 5 days.

1958 Spearing seasonal bag limit on Lake Winnebago reduced to 1 fish .

Spear fishery closed on Upriver Lakes.

1959 Upriver Lakes spearing season reopened for one year for three days (On both Lake Winnebago and the Upriver Lakes at this point there was a 40" (101.6 cm) minimum size limit and a seasonal bag limit of 1).

Hook and Line season on the Wolf River closed.

1955- First estimates of the number of "legal sized" sturgeon in the

1959 Winnebago System developed. Average abundance 1955-59, of legal sized sturgeon in the Winnebago population estimated to be 11,320.

## 1950's Average annual sturgeon spear harvest through the 1950's: 1225

- 1960's Beginning of a three decade period of persistent cloudy water in Lake Winnebago in most winters during the spearing season causing harvest rates to drastically decline from the rates experienced in the 1950's. (Cloudy water due to impact of accelerated run-off of non-point pollution and other changes occurring in the Winnebago Pool lakes).
- Separate sturgeon spearing license is required at a cost of \$2.50; only persons age 14 and over could buy a spearing license, and persons age 16 and over were also required to possess a fishing license; a license could be purchased before, or at anytime during the spearing season.
- 1962 Upriver Lakes new spearing season format implemented: 2 day season once every three years.
- 1968 All transported sturgeon must be "openly exposed", i.e they must be visible in the transporting vehicle, to a person in a passing vehicle.
- 1969 Winnebago spear fishery produces new record low harvest of 8 sturgeon over a 22 day season.

# 1960's Average annual sturgeon spear harvest through the 1960's: 590

- 1971 Upriver Lakes spearing season format reconfigured again to a 2 day season once every five years.
- 1974 Minimum size limit increased from 40" (101.6 cm) to 45" (114.3 cm).
- Dan Folz appointed by the Wisconsin DNR as Oshkosh Area Fisheries Supervisor and re-establishes annual assessments of spawning stock on the Wolf and upper Fox Rivers and spear harvest assessments on Lake Winnebago and the Upriver Lakes. (No assessments had been conducted from 1965 to 1974 except for total annual sturgeon harvest from mandatory registration.) Assessment work initiated in 1975 lays the foundation for future sturgeon management program.
- 1977 The "Main Chapter" of Sturgeon for Tomorrow formed by local sturgeon spearers under the leadership of Bill Casper, Dan Groeschl, Bob Blanck, Vic Schneider and Lloyd Lemke, based out of Malone, Wi, as a private sturgeon conservation organization to provide financial

and political support for sturgeon management, artificial reproduction and other activities.

"Sturgeon Patrol" initiated in the spring using volunteers (citizens, students, DNR staff, etc) to guard sturgeon spawning sites on the Wolf River 24 hours a day during the spawning period; funded by Sturgeon for Tomorrow.

- 1976- Average abundance of "legal sized" portion of the Winnebago
- 1979 sturgeon population estimated to be 20,900 fish.
- 1979 First successful efforts to collect lake sturgeon eggs and propagate young sturgeon in North America conducted on the Wolf River, the DNR Wild Rose Fish Hatchery and at the University of Wisconsin-Milwaukee Center for Great Lakes Studies by Don Czeskleba (Wi DNR) and Fred Binkowski (UW-Milwaukee).
- 1970's Significant increase in sturgeon spawning sites due to increased riprapping activity on the Wolf River by property owners attempting to protect their eroding shorelines from the wakes of increasing motorboat traffic on the river.

# 1970's Average annual sturgeon spear harvest through the 1970's: 596

- 1980 Spearing license fee increased to \$5.50; license has to be purchased prior to season.
  - "Southwest Chapter" of Sturgeon for Tomorrow formed under leadership of Fritz Wendt, Lee Patt, Glenn Ninneman, Mike Schrage, Mike Wendt and Jerry Dombaski, based out of Fond du Lac, Wi.
- 1982 First exceptionally large sturgeon spear harvest, 2238, to occur since the 1950's.
  - "Northern Half Chapter" of Sturgeon for Tomorrow formed under the leadership of Wayne Hoelzel, Bob Schroeder, Louie Hemauer, Tom Burr, Darlene and Bob Holmann, Donny Peterson, Steve Karow, Arnie Landsverk and Don Mielke, based out of Appleton, Wi.
- 1983 Spearing license fee increased to \$7.10.
- 1981- Average abundance of "legal sized" portion of the Winnebago

- sturgeon population estimated to be 31,133 fish.
- 1985 \$1,500 minimum fine established for possession of illegal sturgeon.
- 1986 Sturgeon registration hours extended to 7:00 pm during the spearing season.

In response to loss of habitat, poor water quality, and other fish and wildlife resource issues on the Winnebago System, the Department of Natural Resources initiates project to develop and implement long term plan for comprehensive management and balanced use of Winnebago fish, wildlife and water resources. Ron Bruch is appointed as the Winnebago System Biologist to facilitate development and implementation of this plan.

"West Central Chapter" of Sturgeon for Tomorrow formed under the leadership of Dick and Pat Braasch, Jim Jensen, Donny Payne, Ron Harrison, Ron Jungwirth, Jim Gibson, Bruce Schoenberger, and Bill McAloon, based out of Oshkosh, Wi.

Fish migration barrier is installed at Rapid Croche dam on the lower Fox River and the locks at the dam are closed and sealed to protect Winnebago fish populations from sea lamprey (and other exotic species) threatening invasion from Green Bay.

- "Winnebago Comprehensive Management Plan" is completed and implemented. Implementation of sweeping actions begins immediately addressing habitat and water quality issues in the Winnebago Pool Lakes to improve Winnebago water quality and clarity. Plan addresses wide range of fish and wildlife resource use issues, recommends a fishway be constructed at the Eureka Dam on the upper Fox River to allow sturgeon, walleye and other species access to upstream traditional spawning and nursery grounds, and recommends continuing protection and development of sturgeon spawning sites on the Wolf and upper Fox Rivers.
- 1989 Eureka Fishway is constructed at the Eureka Dam on the upper Fox River.
- 1980's Riprapping projects on Wolf and upper Fox Rivers expands number of sturgeon spawning sites from approximately 20 sites to 50 sites by the end of the decade.

## 1980's Average annual sturgeon spear harvest through the 1980's: 679

1990 Spear harvest of 2908 sturgeon during a 20 day season raises serious concerns about overharvest of the stock.

Ron Bruch appointed to fill the Oshkosh Area Fisheries Supervisor position following the retirement of Dan Folz. Art Techlow hired as new Winnebago System Biologist to replace Bruch and continue driving implementation of the Winnebago Comprehensive Management Plan.

Lake sturgeon utilize the newly constructed fishway at Eureka dam on the upper Fox River for upstream migration to historic spawning sites and as a new spawning site.

Gizzard shad population explodes in the Winnebago System. [Gizzard shad, an excellent forage fish, had been found in Winnebago System waters for decades but warm winters in the late 1980's are suspected to have allowed shad numbers to increase exponentially between 1988-1990. Shad experience a winter die off in Lake Winnebago and concentrate in the southern part of Lake Winnebago as well as in the Upriver Lakes. Sturgeon readily adapted to utilizing dead and dying shad as a forage item with many sturgeon sampled in the spear harvest found to have 2 gallons or more of shad in their foreguts.]

1991 Expanded harvest and population assessments are initiated on Lake Winnebago, the Upriver Lakes and the Wolf and upper Fox Rivers. Harvested fish are checked for sex and maturity in addition to traditional length and weight measurements. New harvest assessment data show adult females were harvested in 1990 at a rate of 19.5% - four times the recommended level of 5%.

Adult female sturgeon comprise 46% of all harvested fish. High minimum size limit of 45" enacted in 1974 suspected cause of the high proportion of adult female sturgeon in the harvest.

Harvest data also show the proportion of sturgeon > 100 lbs (all adult females) in the harvest is significantly lower (5x) than the proportion observed in annual harvests from 1950-1985.

1992 Sturgeon spearing license fee increased to \$10.00.

Winnebago Citizens Sturgeon Advisory Committee, comprised of representatives of 30 sturgeon spearing and conservation organizations from the Winnebago region, established to work with DNR fisheries and law enforcement staff in the development and implementation of regulations and management actions.

- 1992- Construction of "Eureka Rapids" at the Eureka Dam on the upper Fox
- 1993 River. Project led by Walleyes for Tomorrow with substantial financial support from Sturgeon for Tomorrow provides in-river spawning and nursery habitat for sturgeon, walleye and a wide range of other fish species.
- Angling through a sturgeon spearing ice hole prohibited (due to serious illegal hooking problems during the 1992 spearing season).
  - Sturgeon harvest of 1643 fish through 17 day season. Adult females still comprise nearly half of the harvest.
- 1990- Average annual abundance of adult female sturgeon in the Winnebago1994 stock estimated to be 10523 fish. Average abundance of adult males estimated to be 25288.
- 1995 New record season harvest total of 3173 sturgeon registered in a 19 day season. Serious concerns about overharvest of adult females prompts discussions about major changes in Winnebago sturgeon spearing regulations.
- 1996 Emergency rule reduces Lake Winnebago spearing season to nine days with the possibility of extension if the average water clarity on the 3rd day of the season is less than 10 feet (Average water clarity was >12 ft, therefore the season ran only nine days).
- By Clear water in Lake Winnebago in the winter is becoming the norm as opposed to a once a decade phenomena resulting in significant increases in spear harvest success and increases in spearing effort. (Thought to be due, at least in part, to sweeping non-point and point pollution controls implemented following the completion of the Winnebago Comprehensive Management Plan.)
- 1997 Series of new rules went into effect as the 1st phase of developing a new Safe Harvest Management System for Winnebago sturgeon:

- The Lake Winnebago spearing season length is reduced to 16 days, beginning the second Saturday in February (no change in the Upriver Lakes season format);
- The minimum size limit is reduced from 45" to 36" (91.4 cm);
- Successful spearers are required to accompany their fish to a registration station, and to stay within a specific road boundary around the lake until their fish is registered;
- The covering of large ice holes (spearing holes) with shanties is prohibited during periods other than 48 hours before and continuing through the open spearing season;
- Hours of sturgeon spear harvest registration are reduced by one hour to close at 6:00 pm.
- 1998 2051 fish harvested through a 12 day season. Season was cut short after ice went out early on Lake Winnebago on February 26.

Sturgeon for Tomorrow and Otter Street Fishing Club purchase and donate to DNR Fisheries, Oshkosh, state of the art \$30,000 electrofishing boat to assist with sturgeon population assessments on the Winnebago System.

First zebra mussels (exotic mussel originally from the Caspian Sea) found in Winnebago System waters on a buoy marking one of the outlet channels from Lake Winnebago at Neenah-Menasha.

Harvest cap system instituted via emergency rule to manage the Winnebago System sturgeon spear harvest. Under the rule, the season is closed 24 hours after reaching 80% of the total allowable annual harvest of adult females, juvenile females or males. Cap levels set at 400 for adult females, 400 for juvenile females and 2150 for males.

Lake Winnebago spearing season lasts just three days and produces a sturgeon harvest of 1484 fish.

"Night spearing" with lights starting at midnight gains popularity with spearers attempting to maximize their spearing time in the "race horse"

harvest cap fishery.

1995- Average annual abundance of adult female sturgeon in the Winnebago stock estimated to be 6840 fish. Average abundance of adult males estimated to be 40296.

## 1990's Average annual sturgeon spear harvest through the 1990's: 1583

2000 Harvest cap system instituted via permanent rule to manage the Winnebago System sturgeon spear harvest. Under the rule, the season is closed 24 hours after reaching 80% of the total allowable annual harvest of adult females, juvenile females or males. Cap levels set at 400 for adult females, 400 for juvenile females and 2150 for males.

Two day spearing season on Upriver Lakes (held one year early to allow collection of vital population data) produces 2169 sturgeon – a new record for the Upriver Lakes fishery and the first time since the 1950's the Upriver Lakes harvest resulted in overharvest problems.

Spearing season on Lake Winnebago lasted just two days and produced a harvest of 347 fish.

- 2001 Two day season (due to the harvest cap controls) results in harvest of 1590 sturgeon.
- 2002 Emergency rule passed reducing sturgeon spearing hours to 6:30 am to 12:30 pm. Spearers had until 1:30 pm to register their fish the same day it was speared.

Permanent rule changes approved for the 2002 season:

- No night spearing- "unlawful to use any artificial lights as an aid in sturgeon spearing"
- Hole or holes size per shanty are limited to no more than 48 square feet spearers are allowed to have more than one hole per shanty or shelter no matter how big the shelter is, but the total area of all the holes in that one shelter can not exceed 48 square feet.

Shortened spearing day, along with poor ice conditions and only fair water clarity, resulted in a full 16 day season and a total harvest of 847 fish.

"Upper Fox River Sturgeon Rehabilitation Project" launched by Wisconsin DNR, University of Wisconsin-Milwaukee Great lakes WATER Institute and Sturgeon for Tomorrow – a 25 year project with the goal of increasing the productivity of the sturgeon spawning run in the upper Fox River through habitat improvement, stocking and sturgeon migration studies.

Sturgeon for Tomorrow "Main Chapter" celebrates its 25<sup>th</sup> Anniversary.

Zebra mussel population peaks in Lake Winnebage Pool Lakes.

Lake fly hatches much diminished in Lake Winnebago.

2003 Permanent rule passed reducing sturgeon spearing hours to 6:30 am to 12:30 pm. Spearers had until 1:30 pm to register their fish the same day it was speared.

The Winnebago Citizens Sturgeon Advisory Committee worked with Senator Carol Roessler (Oshkosh) and Representative Dean Kaufert (Neenah) to pass new state statutes which:

- Required spearers to buy their sturgeon spearing license by October 31 in order to participate in the following February's Winnebago sturgeon spearing season. An exception was included for Wisconsin residents who turned 14 between November 1 and the last day of the following spearing season, and for Wisconsin residents serving in the Armed Forces and home on leave during the following spearing season.
- Increased the sturgeon spearing license fee from \$10 to \$20 for Wisconsin residents and to \$50 for non-residents.
- Removed the sturgeon spearing tag from the Conservation Patron license.
- Eliminated the requirement that a spearer first purchase a fishing license before they were allowed to purchase a sturgeon spearing license.
- Required that all the sturgeon spearing license revenues be used only

to fund the Winnebago Sturgeon Management Program.

Shortened spearing day, along with terrible ice conditions and fair water clarity, resulted in a 10 day season in 2003 and a total harvest of 902 fish. Ice on the south end of Lake Winnebago (an area which experienced extremely high spear harvest rates since the late 1990's) went out before the end of the spearing season.

By Estimated exploitation rates of adult female sturgeon in the Winnebago system reduced and sustained at annual levels close to recommended 5% from levels near 20% experienced in early to mid 1990's.

Proportion of sturgeon > 100 lbs in the harvest increasing - close to historic levels seen prior to 1985

Average annual abundance of adult female sturgeon in the Winnebago stock estimated to be 10987 fish. Average abundance of adult males estimated to be 41588.

First year that the Conservation Patron tag did not include a sturgeon spearing tag. 8798 resident and 114 non-resident sturgeon spearing licenses sold for the 2004 season.

Harvest caps increased to 425 for adult females and 425 for juvenile females, and reduced to 1300 for males.

High concentrations of sturgeon in the south end of Lake Winnebago draw large numbers of spearers resulting in an extrememly high harvest rate, a short two day season and a total harvest of 1854 fish. 89% of the harvest is taken from the southern 14% of the lake area.

The highest one-day harvest of sturgeon ever – 1,303 on opening day

The shortest season ever, lasting just 12 hours (6 hours each day)

Harvest cap for adult females is exceeded by 61%.

Opening Day Shanty Count of 4751

Total license sales of 8924 (8810 resident, 114 non-resident)

20 fish larger than or equal to 100 pounds were registered (1.1% of the total harvest)

24 females with black eggs harvested (3.5% of the adult females harvested; 1.3% of total harvest). ["Black egg" females are adult females with fully developed ovaries ready to spawn and lay their eggs in the coming spring. Adult female lake sturgeon in the Winnebago System typically spawn once every 3 to 5 years so on average about 25% of the adult female lake sturgeon in the Winnebago System are black egg fish each year].

Largest fish ever registered in the history of the 73 years of sturgeon spear fishing on Lake Winnebago: 188 pounds, 79.5 inches in total length, registered by David Piechowski of Redgranite.

Estimated exploitation rates (% of the total system-wide population harvested) were 4.8% for adult females, and 3.3% for males [although estimate for adult females is considered somewhat unreliable as it was based on only 3 tag returns].

Winnebago Citizens Sturgeon Advisory Committee, DNR staff and the general public, out of concern over short 2004 season and potential for overharvest in future seasons, initiate discussions on harvest and effort management alternatives to maintain acceptable harvests, maintain the open fishery, while at the same time significantly extending the length of the spearing season.

Alternatives suggested by the public and under consideration include creating an Intensive Zone Fishery (partial lottery) in the southern tip of Lake Winnebago and on the Upriver Lakes; creating a refuge in the southern tip of Lake Winnebago and/or on the Upriver Lakes; creating an Intensive Zone Fishery (partial lottery) within a specific depth of Lake Winnebago; creating a refuge within a specific depth of Lake Winnebago.

Zebra mussel population found to be significantly reduced from levels observed in 2003. Sturgeon (as well as drum, carp, perch and other species found to be feeding on zebra mussels).

Few lake fly larvae found in sturgeon stomachs during the spearing season. Poor to no lake fly hatch observed in May although small but significant hatch observed in August. Sturgeon sampled in August – October found to be foraging heavily on lake fly larvae.

2005 Permanent rule implemented limiting the 2005 Upriver Lakes spearing season to one day (6:30 am to 12:30 pm) in an effort to avoid overharvest as was experienced there in the 2000 season.

Emergency rule passed giving the Department of Natural Resources the authority to close the spearing season at the end of a spearing day if 100% of one of the three harvest caps (adult females, juvenile females, males) is exceeded that day. Former permanent harvest cap trigger still remains in force – season would close 24 hours after harvest total reaches 80-99% of any one of the three caps by the end of a fishing day.

Spearers are required to purchase either a spearing license for Lake Winnebago or the Upriver Lakes. For the first time spearers are not be able to fish both water bodies in the same season. A total of 10,634 sturgeon spearing licenses sold for the 2005 season – 6465 for Lake Winnebago, and 4169 for the Upriver Lakes.

Winnebago Citizens Sturgeon Advisory Committee, DNR staff and the general public meet following the 2005 spearing season to develop a final recommendation by March 31, 2005 for future spearing seasons.

Sturgeon for Tomorrow "Southwest Chapter" celebrates its 25<sup>th</sup> Anniversary. Contributions of all chapters to date towards sturgeon management and research activities totals \$576,670.

2000- Average annual sturgeon spear harvest 2000-04: 1542 2004

# Summary of 2004 Lake Winnebago Sturgeon Spear Harvest Season

# **2004 Season Highlights:**

- Total Harvest of 1854 sturgeon
- **Opening Day Shanty Count** of 4751 (second highest shanty count in the history of the fishery)

- **Total license sales of 8924** (8810 resident, 114 non-resident)
- **20 fish larger than or equal to 100 pounds** were registered (1.1% of the total harvest)
- Largest fish was 188 pounds, 79.5 inches in total length, registered by David Piechowski of Redgranite. This was the heaviest fish ever registered in the history of the 73 years of sturgeon spear fishing on Lake Winnebago
- The highest one-day harvest of sturgeon ever 1,303
- The shortest season ever, lasting just 12 hours (6 hours each day)
- Estimated exploitation rates (% of the total system-wide population harvested) were 4.8% for adult females, and 3.3% for males Need to stay below 5% to sustain healthy sturgeon stock

# **2004 Harvest and Effort Data:**Number, average size and sex of harvested fish, 2004

	Number	Ave. Length (in)	Ave. Weight (lbs)	% of Harvest
Juvenile	348	49.3"	25.4 lbs	18.8%
Females				
Adult Females	684	62.4"	56.9 lbs	36.9%
Adult Males	821	53.6"	34.0 lbs	44.3%
Unknown	1	59.5"	33.0 lbs	0.05%
TOTAL				
HARVEST	1854	56.0"	40.8 lbs	

# Number and sex ratio of fish registered by Registration Station, 2004

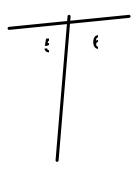
Sturgeon	Juvenile	Adult	Male	Unknown	Total
Registration	Female	Female	Sturgeon	Sturgeon	Sturgeon
Station	Sturgeon	Sturgeon			Registered
Waverly	11	10	9		30
Fishtail	5	15	9		29
Stockbridge	15	25	27		67
Quinney	21	51	46		118
Brotherown	31	58	90	1	180
Pipe	77	175	190		442
Wendt's	141	262	345		748
Jerry's	44	67	72		183

Payne's	3	21	33		57
TOTAL	348	684	821	1	1854
Harvest Cap	425	425	1300		

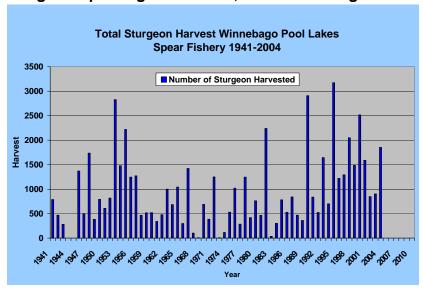
# Opening Day Shanty Counts Lake Winnebago 2004, 2003 and 2002:

Lake Area	2/14/04	2/8/03	2/9/02
1	1040	783	674
2	505	814	950
3	345	170	620
4	385	314	936
5	1492	1180	481
6	984	889	707
Totals	4751	4150	4368

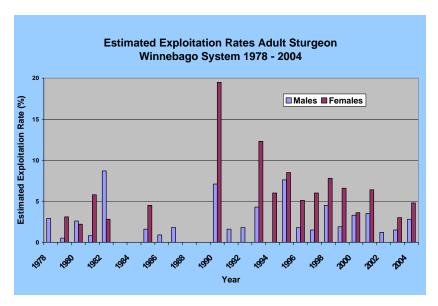




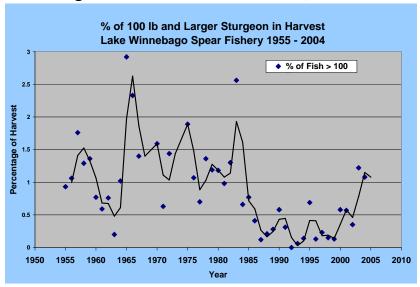
# Sturgeon Spearing Lake Areas, Lake Winnebago



Winnebago System Sturgeon Spear Harvest 1941-2004



Estimated Exploitation Rates—Winnebago System Lake Sturgeon Adult Females and Males, 1978-2004



Percentage of 100 lb and larger sturgeon in the Lake

# Winnebago spear harvest, 1955-2004

# WINNEBAGO CITIZENS STURGEON ADVISORY COMMITTEE

Spearers are actively involved in management of the Winnebago System sturgeon population and fishery through the Winnebago Citizens Sturgeon Advisory Committee.

# Members of the Winnebago Citizens Sturgeon Advisory Committee

			Chilton, WI
<u>Organization</u>	Representative(s)		
		Riverside Hunting &	Jeff Birschbach
Brickyard Fishermen's	Jim Propson	Fishing Club	Mt. Calvary, WI
Club	Bruce Fischer	_	•
	Hilbert, WI	Shadows on the Wolf	Bill Marcks Appleton, WI
Brothertown Fishing	Don Lisowe		,
Club	Chilton, WI	Stockbridge Fishing Club	Jerry Ortlieb
			Bob Parsons
C.A.R.E	Dan Groeschel		Stockbridge, WI
	Malone, WI		
		Sturgeon For Tomorrow	Bill Casper
East Shore	Andy Seibel	Main Chapter	Fond du Lac, WI
Conservation Club	Mt. Calvary, WI		
			Dave Vogds
Fisherman's Road	Dick Mengel		Fond du Lac, WI
Fishing Club	Fond du Lac, WI		
		Sturgeon For Tomorrow	Wayne Hoelzel
Lake Park Fishing Club	Bob Doepker	Northern Half Chapter	Menasha, WI
	Appleton, WI		
		Sturgeon For Tomorrow	Gary Ninneman
Lower Cliff Fishing Club	Don Mielke	Southwest Chapter	N Fond du Lac, WI
	Menasha, WI		
		Sturgeon For Tomorrow	Dick and Pat Braasch
Montgomery Beach	Harry Kachur	West Central Chapter	Oshkosh, WI
Sportsmans Club	Menasha, WI		
		Twin City Rod & Gun	Dick Koerner
Mt. Calvary	Bill Jenkins	Club	Neenah, WI
	Malone, WI		

Otter Street Fishing

Payne's Point Hook &

Poygan Sportsmens Club

Quinney Fishing Club

Spear Club, Inc.

Club

Bill McAloon Oshkosh, WI

John Jurgenson

Dan Rudebeck

Ron Koeppler

Alvin Schneider

Larsen, WI

Neenah, WI

Upper Lakes Fishing Bob Pechman Club Oshkosh, WI

West Shore Fishing Club Ron Goldapske

Stuart Muche Van Dyne, WI

Winnebagoland Sherman Jacobson Conservation Alliance Van Dyne, WI

> Mike Arrowood Fond du Lac, WI

# STURGEON GUARD VOLUNTEERS NEEDED IN SPRING

Each Spring hundreds of volunteers have an opportunity to guard sturgeon at their spawning sites on the Wolf River and protect the fish from poaching. When the sturgeon are spawning along the rocky shorelines of the Wolf they are fairly oblivious to nearby human activity and are very susceptible to illegal harvest. The volunteers of the "Sturgeon Patrol" guard the spawning fish 24 hours a day throughout the spawning season which is typically in late April and early May. The program is directed by DNR Law Enforcement staff and funded, in part, by Sturgeon for Tomorrow, a local sturgeon conservation organization.

When spawning begins, pairs of sturgeon guards are assigned to the sites for twelve hour shifts. Prior to assignment, guards check in at "Sturgeon Camp", just north of Shiocton, where they are fed a good meal, given a generous sack lunch and an identification hat (that they keep), and directed to their site. At the end of their shift, guards return to camp for another hearty home cooked meal before they make their way home.

While it is impossible to predict the exact dates that spawning will occur each year, guards are routinely scheduled from April 15th through May 5th. Spawning generally occurs over a five to seven day period within that time window. While we do our best to get all scheduled guards out on the riverbank to see fish, invariably we must cancel some scheduled shifts if the fish are simply not active. We try in those cases to re-schedule guards into an active period.

If you would like to sign up, send a detailed message to the DNR sturgeon guard coordinator at the DNR Oshkosh Service Center at <a href="mailto:sturgeon@dnr.state.wi.us">sturgeon@dnr.state.wi.us</a> or

call 920-303-5444. Your call will be returned to schedule a day or night next spring that is convenient for you. If possible, make it a family outing by bringing a son or daughter or your spouse. For many it has become a family tradition.

## STURGEON FOR TOMORROW

In 1977 a group of sturgeon enthusiasts from Lake Winnebago founded Sturgeon for Tomorrow to help preserve, protect and enhance the sturgeon resource of the lake system. That group quickly grew into the largest citizen advocacy group for sturgeon in the world, currently made up of four chapters and over 3,000 members. Through tremendous dedication and hard work Sturgeon for Tomorrow (SFT) has raised and donated to date over \$576,000 for sturgeon research and



management since its inception. SFT has funded a wide variety of projects over the years including the sturgeon guard program, spawning and nursery site construction on the Wolf River, sturgeon population assessments, and special assessment equipment purchases. SFT is also responsible for sponsoring research that helped develop Wisconsin's lake sturgeon artificial propagation program. This program has contributed to many sturgeon restoration projects across the Midwestern U.S and Canada. SFT also provided the support necessary to ensure the enactment of the \$1,500 fine for possession of an illegal sturgeon, and actively participates in Winnebago and statewide sturgeon management advisory committees. If you are interested in further information about Sturgeon for Tomorrow or are interested in attending one of their four fund raising banquets held each winter, please call Bill Casper at 920-921-1358.